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CASE NUMBER../ MC00000253 INV INIT/ PORT/ KODD LAST UPDATE/ 06MAR01 CASUALTY TYPE: VESSEL/ X PERSONNEL/ FACILITY/ POLLUTION/ MARPOL/
INCIDENT DATE/ 05JAN00 TIME/ 1502 KNOWN/ X ESTIMATED/ REF CASE/
NOTIFY DATE../ 05JAN00 TIME/ 1535 REPORTER TYPE/ USCG
SUBJECT..../ KODD/RADUGA/SINKING/JONES LOCAL FILE REFERENCE/
                                                         LOCAL CODE/
LOCATION..../ CHINIAK, ALASKA
INCIDENT STATUS: VERIFIED/ X NOT VERIFIED/ VERIFIED, NOT REPORTABLE/
                                     ACTION: CTF/ RETURN/ (TO IAPR)
NOTIFY/
                      --- VALIDATION AND ENDORSEMENT ---
             END/FWD END/CLS RETURN USER-ID NAME

X
LT
X
                                                                           DATE
                                                                         09MAR00
INVESTIGATOR: X
                                                                          09MAR00
UNIT COMMAND:
DIST REQ? :
                 X
                                               06MAR01
HQ REQ? Y:
                       --- GENERAL INFORMATION ---
CITY/ CHINIAK ST/ AK WATERBODY/ NORTH PACIFIC OCEAN COASTRIVER MILE/ . LATITUDE/ N 57-29.9 LONGITUDE/ W 152-10.9
                                ST/ AK WATERBODY/ NORTH PACIFIC OCEAN COASTAL
CAS SUMMARY: TYPE/ SINKING CLASS/ NONE
            POSSIBLE DRUG INVOLVEMENT?/ N PUBLIC VESSEL/ BOATING/
            DEATHS/ MISSING/ INJURED/ TOTAL DAMAGE/
MODE/ SEVERITY CATEGORY/ MATERIAL CATEGORY/
                                                                            65000
ENV IMPACT: MODE/ SEVERITY CATEGORY/ MA
OSC/ EPA REGION/ CLEANUP REQ?/
            RESPONSE BY NSF?/ NSF TIME TO RESPOND/ HOURS
            NOTIFICATION FROM NRC?../ NRC CASE../
            NOTIFICATION FROM APHIS?/ N APHIS PORT/
                            --- INCIDENT BRIEF ---
F/V RADUGA BEGAN TAKING ON WATER AFT AND SANK AFTER COMING DOWN HARD FROM A
WAVE AND HEARING A CRACK. THE VSL SLOWLY SANK THEN ROLLED. 3 POB ABANDONED THE
VSL. 2 PERS ENTERED THE RAFT, 1 PERS UNABLE TO REACH RAFT DUE TO WATER IN SURV
SUIT. ALL WERE RESCUED BY A/S KODD H-60 & RTND TO KODIAK. THEY WERE TREATED &
RELEASED FM LOCAL HOSPITAL SAME DAY FOR MILD HYPOTHERMIA.
                           --- ACTIONS REPORTED ---
                                         SEL EVENT SUPPLEMENTS
           CASE SUPPLEMENTS
   1 WITNESS LIST......(IAWL) / X 14 COLLISION OR GROUNDING.(MCCG) / 2 COMDT RECOMMENDATION.(MCCR) / X 15 EQUIP FAILURE......(MCDR) /
   SEL
    CASUALTY DETAILS....(MCDD) / X 16 FLOOD, CAPSIZE, SINKING..(MCFC) / NARRATIVE SUPPLEMENT.(MCNS) / X 17 FIRE, EXPLOSION.....(MCFE) /
      NARRATIVE SUPPLEMENT. (MCNS) / X
    7 MARPOL DETAIL SUP....(MCMD) / 0 20 LIFESAVING SUPPLEMENT..(MCLS) /
                                         21 PERSONNEL CASUALTY....(MCPC)/
    8 OPERATIONAL CONTROLS (PSOC) / 0
9 PERSONNEL INVOLVEMENT (MCPI) / 0
                                         22 STRUCTURAL FAILURE....(MCSF)/
    10 SMI SUPPLEMENT.....(MCSI)/ 0
    11 TOWING SUPPLEMENT....(MCTS)/ 0
    12 SUBJECT SUPPLEMENT...(MCSS)/
    13 WEATHER FACTORS.....(MCWX)/X
                                                             -SUPPLEMENTS-
                  / 1
PMFPSTOW
PAGE SERVICE DDRAIIREF DMG
US FISHING BOAT
 VESSELS INVOLVED/ 1
   VIN
 D605456 RADUGA US FISHING BOAT ENF ACTIONS: REQ LOU/ REQ SURETY BOND/ NONE/ X
 (ENTER HERE IF ASSOCIATED WITH AN MC CASE, OTHERWISE RECORD IN PSAR)
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CASE NUMBER/ MC00000253

UNIT/ KODD

--- RECOMMENDATION ---

1. BRIEF/ CHANGE ELLIOT SER # STENCILS ACTION PORT/ GMMI RECOMMEND COMDT DISCUSS USE OF MORE PERMANENT MARKING ON ELLIOT/ISSI RAFTS TO ENSURE IT DOES NOT QUICKLY WEAR OFF. HAMPERED THIS INVESTIGATION AS IT SLOWED TIME TO IDENTIFY RAFT AND MANUFACTURER.

--- UNIT ENDORSEMENT --- ENDORSEMENT COMPLETE/ X STATUS/ RECOMMENDED LAST UPDATE/ 09MAR00 Support recommendation of IO.

--- HEADQUARTERS ENDORSEMENT ---LAST UPDATE/ 06MAR01 STATUS/ COMPLETE ENDORSEMENT COMPLETE/ X We concur with the intent of this recommendation. Having markings on the ELLIOT/ISSI liferaft that were more permanent and better able to withstand the elements would have improved the ability to quickly identify that raft and its manufacturer during this investigation. However, while it may have been slowed by the condition of the markings, the investigator was able to ultimately identify the liferaft in this case. In addition, there is no evidence that the lack of more permanent markings on the liferaft negatively impacted its maintenance, inspection or use before or during the casualty. Therefore, we do not find any compelling need to amend the current regulations in 46 CFR 151-33 regarding the required markings for liferafts. However, this issue will be publicized on the Office of Compliance's commercial fishing vessel safety intranet web site and we will forward a copy of this investigation case to each District Fishing Vessel Safety Coordinator.

W. D. Rabe By direction MCCR

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UNIT/ KODD

--- RECOMMENDATION ---

2. BRIEF/ LABEL BAILERS IN ALL RAFTS

RECOMMEND COMDT CONSIDER REQUIRING RAFT MANUFACTURERS TO LABEL EQUIPMENT
THAT MIGHT NOT BE READILY IDENTIFIABLE. MANY BAILERS APPROVED TODAY ARE
NOT, IN OUR OPINION, READILY IDENTIFIABLE AS BAILERS. IN THIS CASE, THEY
WERE LIKELY IN THE RAFT BUT MISTAKEN TO BE SOME OTHER SORT OF CONTAINER.
LABELING WOULD AID THOSE ALREADY IN DEMANDING, CRISES THINKING SITUATIONS.

--- UNIT ENDORSEMENT ---

ENDORSEMENT COMPLETE/ X STATUS/ RECOMMENDED LAST UPDATE/ 09MAR00 Support IO's recommendation. With manufactures reducing size of gear inorder to fit easier into liferaft canisters some gear is no longer familiar to vessel operators. This recommendation would greatly assist personnel in identifying emergency gear.

--- HEADQUARTERS ENDORSEMENT ---

ENDORSEMENT COMPLETE/ X STATUS/ COMPLETE LAST UPDATE/ 05MAR01 We do not concur with this recommendation. The evidence does not indicate whether the crew was unable to locate the bailer because they could not identify it, didn't know where it was located, or because it was missing. Even so, we believe that operators and crewmembers of vessels have a responsibility to ensure they are familiar with the identification, location and use of lifesaving equipment carried on the vessels on which they are employed.

W. D. Rabe By direction CASE/ MC00000253 PORT/ KODD SUBJECT/ KODD/RADUGA/SINKING/JONES DATE/ 05JAN00

--- COMMENTS ---

On O5JANOO, the F/V RADUGA was enroute Kodiak from near Chiniak, Alaska with a load of 10,000-12,000 pounds of cod. The fiberglass, 40 foot fishing vessel was being driven through 12-17 foot waves in limited visibility at a speed of approx 6 knots. The master later reported as he came off of the crest of waves he would slow the engine to glide down the wave. As he came over a wave, he noted he backed down yet came down unusually hard. He also heard a loud crack. The vessel reportedly plowed through the next wave as the master noted she began feeling sluggish aft. He looked aft and noted the aft deck was half underwater. The two other crewmembers, who had been asleep in the cabin due to the rough sea state, were summoned and began preparing for abandon ship. master made a distress call to A/S Kodiak and steered the vessel into the seas to maintain stability. The crew launched the liferaft and donned survival suits. Over approx 15 minutes, the vessel took on more and more water and began listing. Finally, the vessel was stopped as the liferaft broke the weak link and the engine died. As the vessel lay on her side, the crew abandon the vessel into the inflated liferaft. One crewmember was unable to reach the liferaft due to water in his suit. An A/S Kodiak C-130 arrived and flew cover topside as an H-60 arrived and hoisted the crew to safety. The crew was flown to Kodiak where they were treated and released for hypothermia at Providence Medical Center, Kodiak. They were then transported by LT where interviews were conducted. Later that night, another fishing vessel belonging to the master's brother arrived in Kodiak with the EPIRB and the viewed the raft at that time and requested that it be provided to MSD for further evaluation. A Notice to Mariners was published warning mariners to keep watch for the vessel. It was last seen floating by only one stern quarter. It is thought to have sunk as it was never found by two overflights conducted by A/S Kodiak in the following week after the incident.

Crew interviews determined the following:

- 1. The raft inflated fine; however, crewmembers could not locate a bailer to dewater the raft. The bailer was not found upon review by LT . It is unknown if the bailer was in the raft or not. It was determined that it was likely a new style small plastic bag rather than an older plastic bucket type apparatus. It is likely the bailer was onboard but crewmembers could not identify it. Further, the serial number had washed off due to water in the raft making manufacturer tracking difficult during the investigation. The raft is thought to be a 4 man, Elliot, serial number P162, lot 53, manufactered 12FEB98 and purchased through Ocean Safety Services, Homer, AK.
- 2. The survival suit reported to have leaked was tested and found satisfactory. It is suspected that it may have leaked slightly from foot valves, as many do. Most likely, more water came from the suit being too large for the individual in it or partially unzipped. It is to be returned to the owner with caution to have serviced/tested further before use.
- 3. Recent work had been done on the vessel in drydock in Dec 1999. The shaft had been replaced with questionable change from a 2 inch to a 2.25 inch shaft and possible removal of the bearing. The keel coolers had also been opened in the yard; were reported working sat. It was reported fiberglassed back in. Additional aft cabin work had been done on the temporary aft cabin structure with a midship portion being completed just before this trip. It was reported that no hull breaching was done for such installation. Bilge pumps, located in

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--- COMMENTS ---

lazerette, fish hold and 2 in the engine room were reported by master as working sat and coming on approx every 30 minutes. One crewmember reported that one bilge pump had problems and was repaired in Kodiak. He further stated they had been watching it on this trip and it had been fine.

4. It was reported that the vessel had relatively small scupper openings.

Similar vessels have been viewed and it is noted that the scuppers are small and, sometimes, few and far between. This is not thought to have caused the incident; however, may have led the vessel to retain more water and consequently capsize quicker. The added cabin aft for baiting also likely increased water retention.

Final analysis of the case has found no definitive cause of this incident. The crack heard appears to have been a loud, distinct indicator along with the immediate sluggishness of the vessel. It is thought that a catastrophic failure of some sort occurred either to the hull itself or a major through hull fitting. This obviously leads to some suspicion of the shaft work, which was not checked by a surveyor. However, the vessel continued driving into the seas indicating the systems were still operational at least. Only solid decisions able to be made are from that gear which was recovered; the liferaft. Two recommendations based on inspection of raft, crew discussion and phone conversation with raft manufacturer.

- 1. Recommend ISSI/Elliott review the ink labeling process they utilize and implement a system of more permanent marking. The U.S. information portion of the label was unreadable due to water and wear after only a few hours exposure.
- 2. Recommend that COMDT evaluate possibility of requiring all raft manufacturers clearly label equipment that might not be readily identifiable to some users. In this case, the bailers were not identified. Either they were not placed in the raft at manufacturer plant (had not yet been serviced due to age) or were not identified by the crew. They are small plastic bag looking items which would not appear to be the main bailers even to this inspector had I not had several years raft inspection experience. Recommend they be labeled.

Did not list pers casualty of mild hypothermia in MCDD based on all members being treated and released same evening from hospital. Drug testing not completed due to limited value of vessel/property damage.

Operator reports he has been leasing the vessel for some time; he was unable to contact owner to date. Case complete. Raft and survival suit at MSD Kodiak to be given back to operator.